

PROGRESS REPORT-2012

North Central Region
Sustainable Agriculture Research and Education SARE program

Project Title: “The Producer-Initiated Development of a Goat Meat Market in the Black Hills Region of South Dakota”

Project Number: FNC12-846

Producer/Project Leader: Tom Barnes

Address: 11778 Pleasant Valley Road

City, State Zip Code: Custer, South Dakota 57730

Phone: 605 673 2986

E-mail: pvgfiwp@gwtc.net

Website: www.pleasantvalleyfarm.biz

1. Describe in detail your work activities and how you used your grant funds this year.

FEEDING PROGRAM

Introduction

“The Producer-Initiated Development of a Goat Meat Market in the Black Hills Region of South Dakota”, as the title of our grant, states the first year of the grant period was used to complete the initial phase and starting the next step. The adjustments made to the original proposal were improvements to enhance the grant proposal. These changes were all within the context of the grant and were discussed with the SARE grant coordinator.

This interim report will discuss the methodology of the feeding program, provide specifications, data and pertinent information, but will wait until the final report to interpret and make conclusions. The providing of chevon (goat) meat to members of the public through fairs, shows or expos, as well as private citizens, constitutes part of the educational phase.

Selection and Nutrition Program

The study goats were selected from the kids of Boer/Spanish cross bred does from the Pleasant Valley Goat Farm herd. These does were bred to a full blood Boer buck and had kidded once previously. All kids were weighed at birth. They were vaccinated (CD&T) and banded at three weeks. The kids were weaned between 80 and 90 days at which time they were inspected, weighed and a BSC (body score condition) rating was performed giving a baseline for the feeding program. Our selection process was choosing healthy kids from the pool of available wethers. After selecting twenty wethers the weights were ranked from heaviest to lightest. The weights of the animals were placed onto two lists so total weight of each test group was approximately equal. Weights ranged from 28.6 lbs. to 49.2 lbs. and our BCS scores were all 3's or 4's. Utilizing the Body Condition Scoring system, developed by the Langston University Cooperative Extension Service, is where you move your fingers down the backbone and determine if the fat/muscle cover is concave (2), level (3) or convex (4) between the top of the backbone and the adjacent back.

The ten wethers kept by that Pleasant Valley Farm received hay and pasture and remained separate from the other goats on the farm. Rotational grazing was used on three different paddocks, one to four acres, for four and one half months. Our region was in a severe drought so the goat's diet was supplemented with hay. The goats consumed about two lbs. of hay per goat per day during the last two months of the study. Payback Ultra mineral was provided on a free choice basis, but consumption was low. The goats were provided clean, cool water along with shelter to protect them from predators and the elements. The hay and the mineral were both analyzed. This data is not being provided in this interim report, but it will be included in the final report.

The ten wethers provided to Butte Vista Farm were fed hay, pasture and a processed pellet for goats. Butte Vista Farm pastures were more affected by the drought than Pleasant Valley's pastures, resulting in the necessity of feeding more hay. Payback Goat Starter was fed on a 0.5 lb per goat per day basis

and used the same mineral on a free choice basis. The goats were also provided clean, cool water and shelter while keeping them separate from the other goats. Because of the drought conditions on Butte Vista Farm, these wethers were returned to Pleasant Valley Farm for the final three weeks of the study. The goats were kept on the same diet and were placed in their separate pasture. Again the hay was analyzed and the mineral and pellets were PayBack products.

All weights were taken on a Salter Brecknell PS-500 digital scale and are contained on the TABLE 1-2012 Goat Feeding Data. This data will be analyzed to determine the effect of the different feed rations and the analyses will be presented in the final report.

Harvest Program

The twenty wethers were weighed and these weights were used to determine what goats would be selected for the carcass evaluations. The two heaviest and the two lightest from each group were placed on the list. Dr. Mark Woerner, Meat Scientist at Colorado State University in Fort Collins, Colorado, was selected to do our carcass evaluations. A PhD candidate, Scott Howard, was assigned to do the actual evaluations. The goats were delivered to a USDA approved processor, Innovative Foods Custom Meat Processing of Evans, Colorado. They were harvested and weighed, then hung in the cooler for 24 hours. Mr. Howard, with Tom Barnes assisting, completed the eight evaluations. We videotaped the last evaluation to be included in the final DVD presentation. TABLE 2-2012 Goat Harvest Data presents this data and it will be interpreted for the final report.

The carcasses were frozen, then transported in a refrigerated trailer to Fuchs Meat Locker in Martin, South Dakota, to be custom cut. They were cut and wrapped separately so any taste or color difference could be detected between the grain fed and pasture fed goats. This meat will be used in our education program.

EDUCATION

Introduction

The goal of this grant is to lead in the development of a chevon (goat meat) market in the Black Hills region and in that process people will be educated about meat goats. Traditionally, goat meat has been consumed by a variety of ethnic groups, but the intent is that the mainstream population would find it a great meat choice. Fifteen years ago South African Boer goats were imported into the US and have become the most popular meat goat. Goat meat or chevon is high in protein, low in fat, saturated fat, cholesterol, and calories, making it a very healthy choice as a meat source. The grant will help expose people to the flavor and versatility of chevon and, hopefully, become a part of the consumer's diet.

Using the goats in the feeding study, meat will be provided to individuals, restaurants, and samples to people at public events. During the process a variety of dishes will be prepared and served from around

the world. Two surveys were designed to accompany this meat distribution. One survey was for the people sampling the recipe and the other for a select group of food preparers.

Survey #1 Chevon (goat meat) tasting survey

| | | | |
|----------------------------------------------|----------------|--------|---------|
| Have you ever tasted chevon? | 89 respondents | 38 YES | 51 NO |
| Did you enjoy the flavor of the meat? | 89 respondents | 86 YES | 3 NO |
| Did you know the nutritive value of Chevon? | 89 respondents | 26 YES | 63 NO |
| If available would you buy and cook at home? | 89 respondents | 74 YES | 6 NO |
| | | | 9 MAYBE |

Survey #2 Chevon (goat meat) preparers survey

| | | | |
|-------------------------------------------------------------|----------------|--------------|-----------------|
| Was anything done to prepare the meat prior to cooking? | 10 respondents | 3 YES | 7 NO |
| What temperature was the meat cooked at? | 10 respondents | 3 LOW | 4 MED 3 MED/HI |
| How long was the meat cooked? | 10 respondents | 3@5 MIN | 6@10 MIN 1@7 HR |
| Rank the doneness of the meat. | 10 respondents | 2 RARE | 6 MED 2 WELL |
| Number of times you have prepared chevon? | 10 respondents | ZERO to MANY | |
| Would you buy and prepare chevon again? | 10 respondents | 10 YES | |
| Are you aware of the exceptional nutritive value of chevon? | 10 respondents | 6 YES | 4 NO |
| If available would you utilize a cookbook or spice advice? | 10 respondents | 9 YES | 1 NO |

-Both surveys credit USDA-SARE for funding this grant-

Pleasant Valley Farm purchased a tri fold display board. One side gives two recipes for chevon and charts giving the nutritional value of the meat. The middle shows our farm and the different breeds and sexes while they live their lives. The other side depicts why goats are a great animal to raise for a number of reasons on a small acreage operation. Butte Vista Farm created a brochure to handout at events describing their farm’s activities.

A series of small, educational ads were created, FIGURE 1, and run in the regional newspaper to make readers aware of the wonders of goats. Half of the ads were headed EAT SMART EAT GOAT and gives factoids about chevon. The other half describes why raising goats is profitable, beneficial to the land, and fun, with these headed GET YOUR GOAT with a factoid. These ads will run twice a week for six months and are getting good responses.

2. List the results of your project and what you have learned so far.

A. A grain/hay/pasture diet vs. a hay/pasture fed to the smaller less efficient kid appears to give those kids a needed boost in weight gain. The difference in feed rations in the larger more aggressive kids is less. Although the sample size is small we feel when we analyze the data we will find evidence of this statement.

- B. It appears that chevon (goat) is a very acceptable meat for the mainstream population of the Black Hills region.
- C. Meat goat producers must educate the public as to the nutritive value and the versatility of the meat.
- D. As important as educating the consumer is, the education of the producer to increase the number of goats in the market place is equally important.

3. Describe your work plan for the next year.

- A. Analyze the feeding program data.
- B. Serve a variety of chevon dishes in at least three public events and introduce as many people to the taste and versatility of the meat as possible.
- C. Meet our goal for total meat sold and locate suitable retail outlets.
- D. Continue the education of the general public, other producers and encourage potential producers.

4. How did you share information from your project with others? What plans do you have for sharing information next year?

- A. Look for every opportunity to talk about goats and goat production with people or organizations.
 - Have had about 50 visitors to Pleasant Valley Farm in the past year.
 - Given a presentation to a Small Acreage workshop-30 people attended.
 - Served chevon at a Conservation District meeting-22 people attended.
 - Served chevon at an open house for a restaurant to whom Pleasant Valley Farm supplies mutton (goat).
 - Appeared on a local cooking show and prepared a delicious chevon dish.
 - Invited many people into our home to taste chevon.
 - Reported grant progress to the Black Hills Meat Goat Producers members
 - Offer to present this grant at the 2015 SARE Western Conference.
- B. Continue to look for every opportunity to expose people to the benefits of chevon.
- C. Create a DVD for distribution to interested people and write a complete and credible final report.











| | | |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Get Your Goat</p>  <p>Goats can be raised on small acreages to provide meat, dairy, fiber and show.</p> <p>For more information call the BH Goat Producers at 605-673-2986</p> <p>Funded by USDA - SARE Grant</p> | <p>Eat Smart Eat Goat</p>  <p>Goat is known as - N. Europe - Chevon, Mexico - Cabrilo, India - Mutton</p> <p>For more information call the BH Goat Producers at 605-673-2986</p> <p>Funded by USDA - SARE Grant</p> | <p>Eat Smart Eat Goat</p>  <p>Chevon is lower in saturated fat, cholesterol and calories than beef, chicken, lamb or pork.</p> <p>For more information call the BH Goat Producers at 605-673-2986</p> <p>Funded by USDA - SARE Grant</p> |
| <p>Eat Smart Eat Goat</p>  <p>63% of all red meat consumed worldwide is chevon.</p> <p>For more information call the BH Goat Producers at 605-673-2986</p> <p>Funded by USDA - SARE Grant</p> | <p>Eat Smart Eat Goat</p>  <p>Chevon is prepared in delicious recipes from around the world!</p> <p>For more information call the BH Goat Producers at 605-673-2986</p> <p>Funded by USDA - SARE Grant</p> | <p>Eat Smart Eat Goat</p>  <p>Fresh locally raised chevon at:</p> <ul style="list-style-type: none"> • Curry Masala Resaurants • Breadroot Coop • Dee's Meat Market • Pleasant Vally Farm <p>For more information call the BH Goat Producers at 605-673-2986</p> <p>Funded by USDA - SARE Grant</p> |
| <p>Get Your Goat</p>  <p>An est. 50% of chevon consumed in the U.S. is imported - MORE PRODUCERS NEEDED!</p> <p>For more information call the BH Goat Producers at 605-673-2986</p> <p>Funded by USDA - SARE Grant</p> | <p>Get Your Goat Nature's Weed Whacker</p>  <p>Goats love leafy spurge and Canada Thistle.</p> <p>For more information call the BH Goat Producers at 605-673-2986</p> <p>Funded by USDA - SARE Grant</p> | |
| <p>Get Your Goat</p>  <p>Goats are the fastest growing show animal in the U.S. for all ages.</p> <p>For more information call the BH Goat Producers at 605-673-2986</p> <p>Funded by USDA - SARE Grant</p> | <p>Get Your Goat Nature's Weed Whacker</p>  <p>Goats are great animals to graze with cattle and horses - they eat a wide variety of plants.</p> <p>For more information call the BH Goat Producers at 605-673-2986</p> <p>Funded by USDA - SARE Grant</p> | |

Figure 1